Trinity River Channel Rehabilitation Sites: Lower Steiner Flat (River Mile 90.2-91.3) and Upper Junction City (River Mile 79.8-80.4)

DRAFT Environmental Assessment/Initial Study

To tier to:

The Trinity River Mainstem Fishery Restoration Environmental Impact Statement

And

Channel Rehabilitation and Sediment Management for Remaining Phase 1 and Phase 2 Sites Master Environmental Impact Report
(State Clearinghouse # 2008032110)

February 2012

California Lead Agency for CEQA
North Coast Regional Water Quality Control Board

Project Proponent and Federal Lead Agency for NEPA
Trinity River Restoration Program
U. S. Department of the Interior
Bureau of Reclamation

Federal Co-lead Agency for NEPA
U. S. Department of Interior, Bureau of Land Management

Project Proponent's Consultant
North Wind Services, LLC

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Acronyms and Abbreviations

AEAM	Adaptive Environmental Assessment and Management
afa	acre feet annually
APE	Area of Potential Effect
Basin Plan	Water Quality Control Plan for the North Coast Region
BFE	base flood elevation
BLM	U.S. Bureau of Land Management
BMP	best management practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CEQ	President's Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CHP	California Highway Patrol
CNDDB	California Natural Diversity Database
CRHR	California Register of Historic Resources
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWA	Clean Water Act
dB	logarithmic decibel
dBA	"A-weighted" decibel scale
DWR	Department of Water Resources
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ELJ	Engineered Log Jam
EPA	Environmental Protection Agency
ESL	Environmental Site Limit
ESU	Evolutionarily Significant Unit
FACW	Facultative Wetland Plants
FAC	Facultative Plants
FACU	Facultative Upland Plants
FEIS	Final Environmental Impact Statement

FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
fps	feet per second
GHG	greenhouse gas
GIS	geographic information system
HAP	Hazardous Air Pollutant
HEC-RAS	Hydraulic Engineering Center River Analysis System
HVT	Hoopa Valley Tribe
IAP	Integrated Assessment Plan
IBLA	Interior Board of Land Appeals
IS	Initial Study
KMP	Klamath Mountains Province
KOP	key observation point
L_{dn}	day-night average sound level
LRMP	Land and Resource Management Plan
LSF	Lower Steiner Flat
LWD	large woody debris
MoA	Memorandum of Agreement
MBTA	Migratory Bird Treaty Act
MDB&M	Mount Diablo Base and Meridian
MFF	maximum fishery flows
MMRP	Mitigation Monitoring and Reporting Program
MSA	Magnuson-Stevens Fishery Conservation and Management Act
msl	mean sea level
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCAB	North Coast Air Basin
NCUAQMD	North Coast Unified Air Quality Management District
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
NI	No Indicator
NMFS	National Marine Fisheries Service
NOP	Notice of Preparation
NRHP	National Register of Historic Places
NTU	nephelometric turbidity unit
OBL	Obligate Wetland Plants
OHWM	ordinary high water mark
PA	Programmatic Agreement
$PM_{2.5}$	particulate matter less than 2.5 microns in aerodynamic diameter
PM_{10}	particulate matter less than 10 microns in aerodynamic diameter
PRC	Public Resources Code
Proposed Project	Lower Steiner Flat and Upper Junction City Rehabilitation Sites

Q	flow rate (typically expressed in cfs)
Q_s	summer base flow
$Q_{1.5}$	1.5-year return interval design flow
Q_{100}	100-year flood flow
Reclamation	U.S. Bureau of Reclamation
Regional Water Board	North Coast Regional Water Quality Control Board
RM	river mile
RMP	Resource Management Plan
ROD	Record of Decision
SAB	Scientific Advisory Board
SHPO	State Historic Preservation Office
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SONCC	Southern Oregon/Northern California Coast
SR	State Route
SRA	shaded riverine aquatic
STNF	Shasta-Trinity National Forest
SWPPP	Storm Water Pollution Prevention Plan
TAC	Toxic Air Contaminant
TCRCD	Trinity County Resource Conservation District
TMC	Trinity Management Council
TRD	Trinity River Division
TRGA	Trinity River Guides Association
TRRP	Trinity River Restoration Program
UJC	Upper Junction City
UPL	Obligate Upland Plants
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDI	U.S. Department of Interior
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VAU	visual assessment unit
VFD	volunteer fire department
WSE	water-surface elevation
WHR	Wildlife Habitat Relationships
WSRA	Wild and Scenic Rivers Act
YT	Yurok Tribe

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Chapter 1

1 INTRODUCTION AND BACKGROUND

1.1 Overview

The United States Department of Interior (USDI) Bureau of Reclamation (Reclamation) proposes to conduct mechanical channel rehabilitation activities on the mainstem Trinity River downstream of Lewiston Dam at the Lower Steiner Flat Rehabilitation Site (River Mile [RM] 90.2-91.3) and Upper Junction City Rehabilitation Site (RM 79.8-80.4) with some activities also occurring in the adjacent Lower Junction City Rehabilitation Site boundary; the activities proposed at these three sites are hereafter referred to as "Proposed Project" or "Project." The Proposed Project includes two phases of work at the Lower Steiner Flat Rehabilitation Site, work at the Upper Junction City Rehabilitation Site, and placement of excavated materials within the Lower Junction City Rehabilitation Site boundary. Project work would be part of the ongoing Trinity River Restoration Program's (TRRP) work to restore the anadromous fishery of the Trinity River. The proposed river channel rehabilitation activities would recreate complex salmon and steelhead habitat, enhance natural river processes for the benefit of wildlife, and provide conditions suitable for reestablishing native riparian vegetation.

The fundamental purpose of the TRRP is to restore historic river processes to the river via implementation of the 2000 Record of Decision (ROD) for the Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report (Trinity River FEIS/EIR). It is the intent of the TRRP to recreate a properly functioning river, albeit on a smaller scale, in order to increase naturally spawning anadromous fish populations to levels which existed prior to construction of the Lewiston and Trinity Dams. The target reach for Trinity River restoration is the approximately 40-mile length of river downstream of Lewiston Dam to the confluence of the North Fork Trinity. In this reach, the ROD outlined six integral components for execution:

- Implementation of a variable annual flow regime according to recommendations provided in the Trinity River Flow Evaluation Report (1999),
- Mechanical channel rehabilitation,
- Fine and coarse sediment management,
- Watershed restoration,
- Infrastructure improvement, and
- Adaptive environmental assessment and management.

In general, the TRRP approach to channel rehabilitation is to selectively remove terraces and riparian berms (i.e., berms that are anchored with woody vegetation and consolidated sand deposits) that developed after the Lewiston and Trinity Dams were completed and historic peak scouring flows were lost. Along with berm removal, the approach involves physical alteration of floodplains to inundate more frequently, placement of large wood, and removal of riparian vegetation at strategic locations to promote the alluvial processes necessary for the restoration and maintenance of complex riverine habitats.

This environmental review document was prepared by Reclamation, in coordination with the USDI Bureau of Land Management (BLM), a federal land manager at the Proposed Project sites and federal co-lead for National Environmental Policy Act (NEPA) review. These federal agencies worked with the North Coast Regional Water Quality Control Board (Regional Water Board), as the California state lead agency, to analyze the potential impacts of the proposed activities according to NEPA and California Environmental Quality Act (CEQA) guidelines. The results of these analyses are recorded in this Project Environmental Assessment/Initial Study (EA/IS).

The EA portion of this document tiers from the 2000 Trinity River FEIS/EIR. However, Trinity County, the CEQA lead agency for the Trinity River FEIS/EIR chose not to "certify" the EIR portion of the 2000 document. Therefore, the EIR portion of the Trinity River FEIS/EIR was not available for the CEQA portion of this document, or other earlier TRRP CEQA documents, to "tier" from. Consequently, four joint EA/EIRs were completed to analyze TRRP channel rehabilitation projects between 2004 and 2008[1]. Based upon the similarity of these projects and their environmental impacts, and agreement that future TRRP projects would have similar impacts, a separate programmatic CEQA document, the Master Environmental Impact Report for channel rehabilitation and sediment management activities for the Remaining Phase 1 and Phase 2 sites (Trinity River Master EIR) was developed. The Regional Water Board acted as lead agency for the Trinity River Master EIR and site specific EA/EIR (State Clearinghouse number 2008032110). The Regional Water Board certified these environmental documents on August 25, 2009. Phase 2 sites, like the Proposed Project, are now eligible for enrollment and CEQA coverage following the completion of any subsequent project-specific environmental analysis required to supplement the programmatic level review contained in the Trinity River Master EIR. Under California Code of Regulations, title 14, section 15177, after a Master EIR has been prepared and certified, subsequent projects which the lead agency determines as being within the scope of the Master EIR will be subject to only limited environmental review.

The preparation of a new environmental document and new written findings will not be required if, based on a review of the initial study prepared for the subsequent project, the lead agency determines, on the basis of written findings, that no additional significant environmental effect will result from the proposal, no new additional mitigation measures or alternatives are required, and that the project is within the scope of the Master EIR. Whether a subsequent project is within the scope of the Master EIR is a question of fact to be determined by the lead agency based upon a review of the initial study to determine whether there are additional significant effects or new additional mitigation measures or alternatives required for the subsequent project that are not already discussed in the Master EIR. If the Regional Water Board requires additional analysis, site-specific CEQA environmental documentation is required. This Proposed Project EA/IS contains an initial study and site-specific project description and other information required to apply for enrollment under General Permit R1-2010-0028 for Trinity River channel rehabilitation activities which the Regional Water Board will consider in making its determination and approval decision.

The Trinity River Master EIR (North Coast Regional Water Quality Control Board and U.S. Bureau of Reclamation 2009) is divided into two parts. Part 1 evaluates the environmental impacts of the proposed channel rehabilitation and sediment management activities along the river and at the

[1] Hocker Flat (Reclamation and California Department of Water Resources 2004), the Canyon Creek Suite (Reclamation and the Regional Board 2006), Indian Creek (Reclamation and Trinity County 2007), and Lewiston-Dark Gulch (Reclamation and the Trinity County Resource Conservation District 2008).

Remaining Phase 1 and Phase 2 sites. From a programmatic perspective, it provides a discussion of the existing conditions, environmental impacts, and mitigation measures required to comply with CEQA (California Public Resources Code [PRC], Section 21000 et seq.). In addition to addressing direct and indirect impacts associated with the Proposed Project and alternatives, the Trinity River Master EIR addresses cumulative and growth-inducing impacts that could be associated with activities at the remaining Phase 1 and Phase 2 sites.

Part 2 of the Trinity River Master EIR is an EA/Draft EIR. The EA/Draft EIR is an integrated NEPA/CEQA document that evaluates the environmental impacts of the proposed channel rehabilitation activities at a project-specific level for the Remaining Phase 1 sites. Those sites had sufficiently developed mechanical channel rehabilitation plans to allow for detailed analysis. Activities at 23 other planned restoration locations, called the "Phase 2" sites, were included in the Trinity River Master EIR but sufficient information was not available for detailed analysis at that time; that is, they were included in the document as conceptual and thus were analyzed at a programmatic level. Programmatic descriptions of the Lower Steiner Flat and Upper Junction City projects were included in the Master EIR analysis under the description of Phase 2 site activities.

This EA/IS for the Proposed Project provides site-specific details for environmental impact analyses and has been prepared to comply with NEPA (42 United States Code [USC], Section 4321 et seq.) and CEQA (California PRC, Section 21000 et seq.). The Trinity River Master EIR meets the elements required for a Program EIR pursuant to California Code of Regulations, Title 14 (Natural Resources), Section 15168. The Trinity River Master EIR provides programmatic CEQA level review, as the Trinity River FEIS/EIR serves under NEPA, from which site-specific projects may tier. Therefore the Lower Steiner Flat and Upper Junction City sites are considered subsequent site-specific projects that are tiered to the Trinity River Master EIR. This combined NEPA/CEQA document evaluates the environmental impacts of the proposed channel rehabilitation and sediment management activities at the project-specific level for the Proposed Project.

1.2 Regional Setting

The Trinity River originates in the rugged Salmon-Trinity Mountains of northern California in the northeast corner of Trinity County. The Trinity River Basin encompasses the majority of Trinity County and the easternmost portion of Humboldt County (see Figure 1). The mainstem Trinity River flows a total of 170 miles from its headwaters to its confluence with the Klamath River at Weitchpec, on the Yurok Indian Reservation. The Trinity River passes through Trinity County, Humboldt County, the Hoopa Valley Indian Reservation, and the Yurok Indian Reservation. Much of the basin is composed of federal lands managed by the United States Forest Service (USFS), BLM, and, to a lesser extent, Reclamation. Ownership along the Trinity River corridor is a mixture of public, Tribal, and private lands.

The Trinity River flows generally southward until impounded by Trinity Dam and Lewiston Dam. The river drains a watershed of approximately 2,965 square miles; about one-quarter of this area is above Lewiston Dam. From Lewiston Dam, the river flows westward for 112 miles until it enters the Klamath River near the town of Weitchpec, 43.5 miles upstream from the Pacific Ocean. The Klamath River flows northwesterly for approximately 40 miles from its confluence with the Trinity River before entering the Pacific Ocean.

Topography of the Trinity River Basin is predominantly mountainous with a heavily forested basin. Elevations in the watershed range from 8,888 feet above mean sea level (msl) at Sawtooth Mountain in the Trinity Alps to 300 feet above msl at the confluence of the Trinity and Klamath rivers. Land use within the Trinity River Basin is greatly influenced by the large amount of public, Tribal, and private lands, much of which is used for timber production and other natural resource-related uses. Two scenic byways, State Route 299 (SR-299) and SR-3, cross the county. SR-299 is the primary travel corridor through Trinity County, connecting the Central Valley with the coastal communities of Humboldt County. The area's numerous lakes and rivers provide many recreational opportunities, including fishing and boating. Private uses along the Trinity River are generally limited to scattered residential and commercial development.

1.3 Project Location

The general setting for the TRRP is within the 40-mile reach of the mainstem Trinity River between Lewiston Dam and the confluence of the North Fork Trinity. The Trinity River Master EIR includes figures depicting the location of all of the rehabilitation projects proposed by the TRRP on the Trinity River. The Lower Steiner Flat Rehabilitation Site is located on the Trinity River (RM 90.2-91.3) near Douglas City, California (Figure 1) at Township 32N, Range 10W, and within Sections 1 and 2 Mount Diablo Base and Meridian (MDB&M). The rehabilitation site is 21 miles downstream of Lewiston Dam, 4 miles downstream of the Douglas City Bridge, and is reached by traveling downstream along Steiner Flat Road approximately 3.5 miles from Douglas City, California. The Lower Steiner Flat environmental site limit (ESL) and responsible land managers are shown on Figure 2.

The Upper Junction City Rehabilitation Site is located adjacent to Junction City, California next to SR-299 approximately 8 miles west of Weaverville, California. The rehabilitation site is located on the Trinity River (RM 79.8-80.4) upstream from the Dutch Creek Road Bridge at Township 33N, Range 11W, Section 12. The Lower Junction City Rehabilitation Site, where some excavated material would be placed, is just downstream of Dutch Creek Road and north of the Upper Junction City site. The Upper Junction City ESL and responsible land managers are shown on Figure 3 along with the portion of the Lower Junction City site where the excavated material would be placed.

The current Project site boundaries are shown on Figures 2 and 3. TRRP staff, with interdisciplinary review from the Trinity Management Council (TMC) technical staff, developed the site boundaries to incorporate the rehabilitation activities that were considered. For the Proposed Project, these activities include removal of encroaching riparian vegetation, rehabilitation of floodplain and in-channel alluvial features (e.g., an island, side-channel, and large wood and mixed wood-boulder habitat and hydraulic structures) and construction of off-channel habitat for aquatic- and riparian-dependent species, and rehabilitation of upland habitat.

Helena
Pear Tree
Valdor Gulch
Wheel Gulch
34N 10W
Upper Conner Creek
Elkhorn
Conner Creek
State Hwy 299
Hocker Flat
Lower Junction City
Junction City
Upper Junction City
T33N, R11W, Section 12
Sky Ranch
Oregon Gulch
Sheridan Creek
33N 11W
Deep Gulch
Soldier Creek
Chapman Ranch
Weaverville
State Hwy 299
34N 9W
State Hwy 3
China Gulch
Limekiln Gulch
33N 10W
Steel Bridge Day Use
Douglas City
Evan's Bar
Lorenz Gulch
Dutch Creek
Lower Steiner Flat
T32N, R10W, Section 1 & 2
32N 10W
Middle Steiner Flat
Douglas City
Reading Creek
State Hwy 3
Indian Creek
32N 9W
Lewiston 4
Sawmill
Upper Rush Creek
Lower Rush Creek
Dark Gulch
33N 9W
Lewiston
34N 8W
Lowden Ranch
Trinity House Gulch
Tom Lang Gulch
Poker Bar
McIntyre Gulch
32N 8W

California Location Map
Redding
Project Sites
Sacramento

Figure 1. Rehabilitation Site Locations

LEGEND

- Cities
- Public Land Survey System
- 2012 Rehabilitation Sites

TRRP Rehabilitation Sites

Status

- Phase 1
- Phase 2

PLSS Mount Diablo Base and Meridian
California State Plane Zone 1, NAD83 Feet

Imagery collected by Watershed Sciences Inc., on 8-25-2010

Prepared for the Bureau of Reclamation
Trinity River Restoration Program

TRINITY RIVER RESTORATION PROGRAM
2012 PROPOSED CHANNEL REHABILITATION SITES ENVIRONMENTAL ASSESSMENT/INITIAL STUDY

DATE: 12-21-2011

0 2 4 6 8 Miles

SCALE: 1:80,000

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\\Fgis-ws\corp_gis\Projects\Trinity River\Project\Lower Steiner Flats\Final\Figure 1 - Lower Steiner Flat Overview.mxd

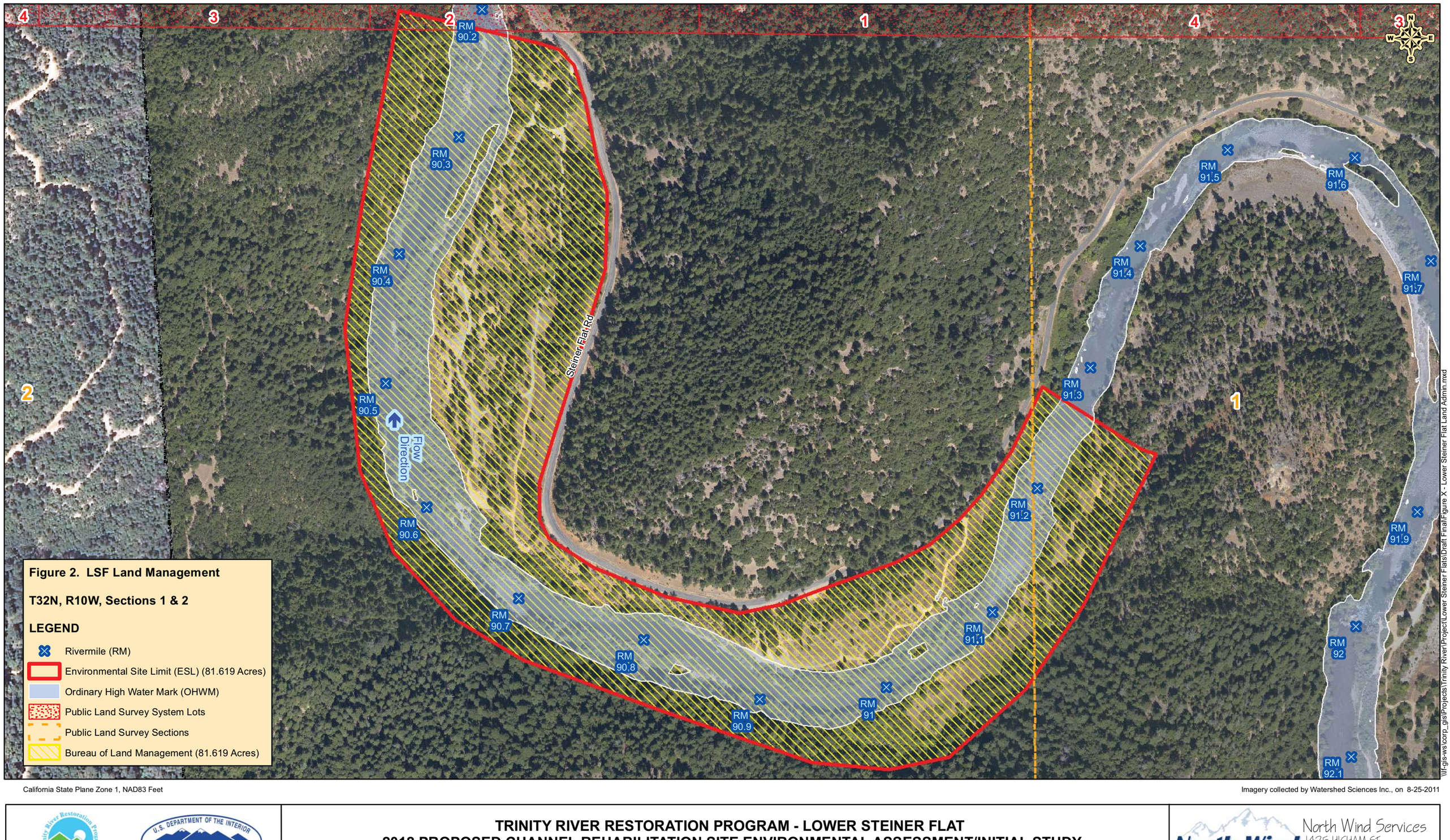

Figure 2. LSF Land Management

T32N, R10W, Sections 1 & 2

LEGEND

- Rivermile (RM)
- Environmental Site Limit (ESL) (81.619 Acres)
- Ordinary High Water Mark (OHWM)
- Public Land Survey System Lots
- Public Land Survey Sections
- Bureau of Land Management (81.619 Acres)

California State Plane Zone 1, NAD83 Feet

Imagery collected by Watershed Sciences Inc., on 8-25-2011

\\fs-gis-ws\corp_gis\Projects\Trinity River\Project\Lower Steiner Flats\Draft Final\Figure X - Lower Steiner Flat Land Admin.mxd

Prepared for the Bureau of Reclamation
Trinity River Restoration Program

TRINITY RIVER RESTORATION PROGRAM - LOWER STEINER FLAT
2012 PROPOSED CHANNEL REHABILITATION SITE ENVIRONMENTAL ASSESSMENT/INITIAL STUDY

DATE: 2-3-2012

0 500 1,000 1,500 2,000 Feet

SCALE: 1:4,200

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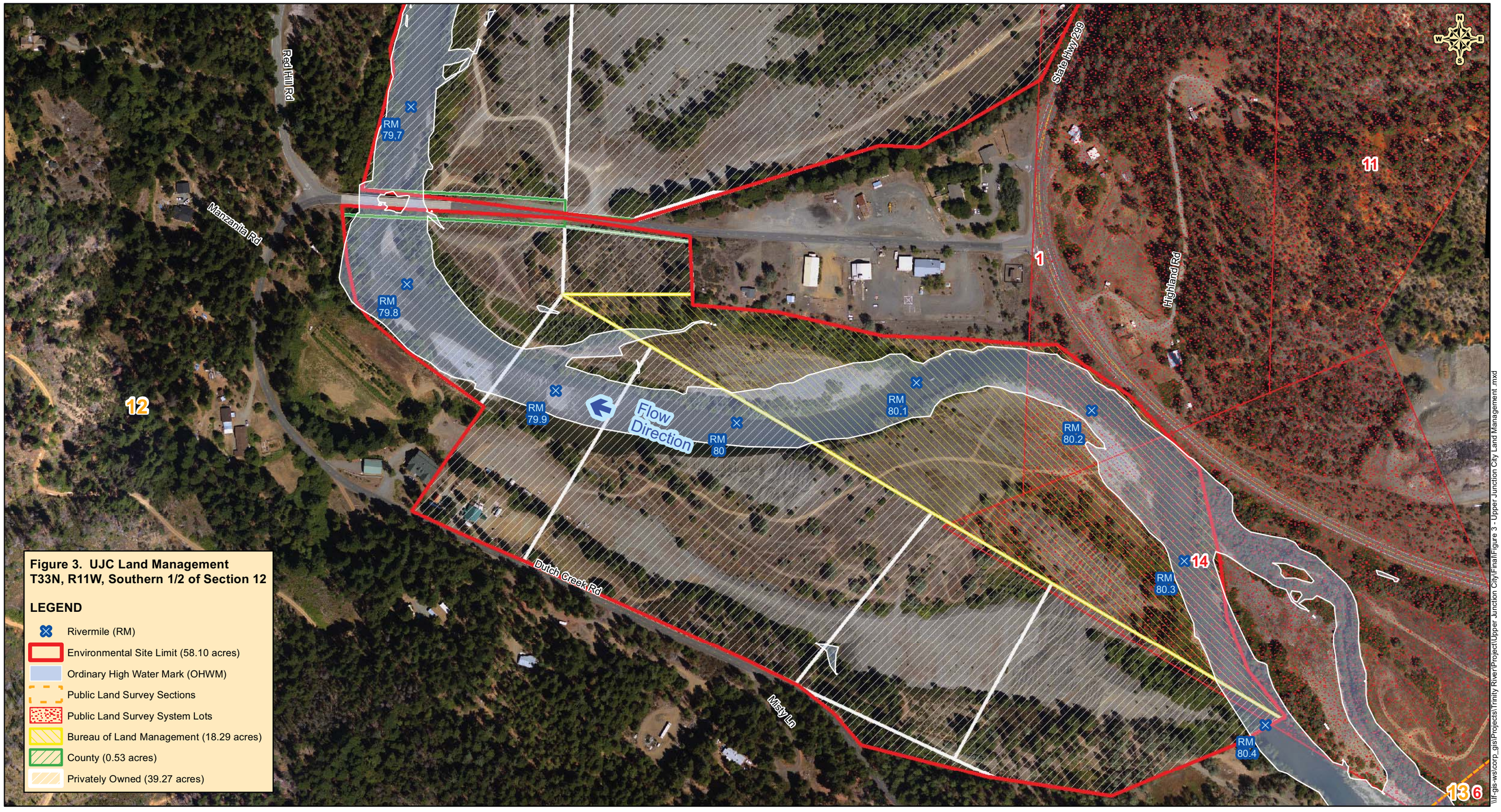

Figure 3. UJC Land Management
T33N, R11W, Southern 1/2 of Section 12

LEGEND

- Rivermile (RM)
- Environmental Site Limit (58.10 acres)
- Ordinary High Water Mark (OHWM)
- Public Land Survey Sections
- Public Land Survey System Lots
- Bureau of Land Management (18.29 acres)
- County (0.53 acres)
- Privately Owned (39.27 acres)

California State Plane Zone 1, NAD83 Feet

Imagery collected by Watershed Sciences Inc., on 8-25-2011

\\lf-gis-ws\corp_gis\Projects\Trinity River\Project\Upper Junction City\Final\Figure 3 - Upper Junction City Land Management.mxd

Prepared for the Bureau of Reclamation
Trinity River Restoration Program

TRINITY RIVER RESTORATION PROGRAM - UPPER JUNCTION CITY
2012 PROPOSED CHANNEL REHABILITATION SITE ENVIRONMENTAL ASSESSMENT/INITIAL STUDY

DATE: 2-3-2012

0 300 600 900 1,200 Feet

SCALE: 1:3,100

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1.4 Project History and Background

Completion of Trinity Dam and Lewiston Dam in 1964 blocked anadromous fish access to habitat upstream of Lewiston Dam restricting them to habitat below the dam. The location of the Trinity River relative to other components of the Central Valley Project (CVP) is shown on Figure 1-1 in the Trinity River Master EIR. Trans-basin diversions from Lewiston Lake to the Sacramento River Basin altered the hydrologic regime of the Trinity River, diminishing annual flows by up to 90 percent. Consequences of diminished flows included encroachment of riparian vegetation, establishment of riparian berms, and fossilization of point bars at various locations along the river, as far downstream as the North Fork Trinity River. These geomorphic changes reduced the diversity of riparian age classes and riparian vegetation species, impaired floodplain access, and adversely affected fish habitat.

In 1981, in response to declines in salmon and steelhead populations, the Secretary of the Interior directed the U.S. Fish and Wildlife Service (USFWS) to initiate a 12-year flow study to determine the effectiveness of flow restoration and other mitigation measures for impacts of the Trinity River Division (TRD) of the CVP. Then, in 1984, Congress enacted the Trinity River Fish and Wildlife Program to further promote and support management and fishery restoration actions in the Trinity River Basin. Under this program, nine pilot bank rehabilitation projects between Lewiston Dam and the North Fork Trinity River were implemented between 1991 and 1993, in addition to other actions. In 1992, Congress enacted the Central Valley Project Improvement Act (CVPIA). One purpose of the CVPIA (Section 3406(b)(23)) was to protect, restore, and enhance fish, wildlife, and associated habitats in the Trinity River Basin. The act also directed the Secretary of the Interior to finish the 12-year Trinity River Flow Evaluation Report and to develop recommendations "regarding permanent instream fishery flow requirements, TRD operating criteria, and procedures for the restoration and maintenance of the Trinity River fishery." The Trinity River Flow Evaluation Final Report was ultimately published in 1999 by the USFWS and the Hoopa Valley Tribe (HVT), providing a framework for restoration activities below Lewiston Dam as well as the basis for the preferred alternative in the concurrent programmatic environmental analysis.

In 1994, the USFWS as the NEPA lead agency and Trinity County as the CEQA lead agency began the public process for developing the Trinity River Mainstem Fishery Restoration EIS/EIR. The ROD for the Trinity River FEIS/EIR (December 19, 2000; USDI 2000) directed USDI agencies to implement the Flow Evaluation Alternative, which was identified as the Preferred Alternative in the Trinity River FEIS/EIR. However, the EIR was not certified by Trinity County. The ROD set forth prescribed Trinity River flows for five water-year types: extremely wet (815,200 acre-feet annually [afa]), wet (701,000 afa), normal (646,900 afa), dry (452,600 afa), and critically dry (368,600 afa). The flows prescribed by the 2000 ROD are deemed to constitute the "existing [hydrological] environment" for CEQA purposes, and are considered the basis for the environmental analysis under both NEPA and CEQA.

The Trinity River Master EIR (North Coast Regional Water Quality Control Board and U.S. Bureau of Reclamation 2009) includes a brief chronology summarizing the most pertinent management actions that have occurred relevant to the Trinity River Basin between 1938 and 2008 (Section 1.4.4. page 1-8). Additional details concerning the legislative and management history can be found in the Trinity River FEIS/EIR (USFWS et al. 1999) and the EA/Final EIRs for TRRP projects constructed

between 2005 and 2008[2]. These documents are on file at the TRRP office in Weaverville, California, available on the TRRP website (www.trrp.net), and at the Weaverville public library. The Trinity River Master EIR (Section 1.4.5 pages 1-10 through 1-15) also contains a summary of the various restoration activities that have been undertaken since the signing of the ROD, as well as brief discussions of other watershed restoration programs and activities occurring within the basin; additional information is available on the TRRP website[3].

The TRRP acts under guidance of the TMC, a collaborative board of natural resource managing agencies, tribes, and local government. TMC member agencies include Reclamation, USFWS, National Marine Fisheries Service (NMFS), USFS, HVT, Yurok Tribe (YT), the California Natural Resources Agency represented by the California Department of Fish and Game [CDFG] and the California Department of Water Resources [DWR]), and Trinity County. Technical experts associated with each of these entities participate in the design and review of the rehabilitation sites.

An integral part of the TRRP is the implementation of an Adaptive Environmental Assessment and Management (AEAM) Program. As described in the Trinity River FEIS/EIR, an AEAM process is important for management of complex physical and biological systems like the Trinity River.

The ROD for the Trinity River FEIS/EIR specified that mechanical channel rehabilitation activities would be implemented on the mainstem Trinity River between Lewiston Dam and the North Fork Trinity River. Conceptually, the overall intent of these activities was to selectively remove fossilized berms (berms that have been anchored by extensive woody vegetation root systems and consolidated sand deposits); revegetate and provide conditions for regrowth/sustenance of native riparian vegetation; and reestablish alternate point bars and complex fish habitat similar in form to those that existed prior to the construction of the TRD.

The Trinity River FEIS/EIR identified 44 potential channel rehabilitation sites and 3 potential side-channel sites for consideration by the TRRP. Site selection was based on identifying locations where the maximum amount of habitat for native anadromous fishes could be initiated through construction projects, and then enhanced or maintained by a combination of river flows plus coarse sediment augmentation. Consequently, the original sites were chosen based largely on the existence of riparian berms and where channel morphology, sediment supply, and high-flow hydraulics would encourage a dynamic alluvial channel.

In 2002 the TRRP office was opened in Weaverville specifically to implement the components of the ROD. The first accomplishment of the TRRP was to upgrade infrastructure and bridges so that recommended ROD flows of up to 11,000 cfs could be safely passed. Over 100 potable water wells that were impacted by increased river flows were enhanced, four river crossings (bridges) improved, one house moved, and several pieces of infrastructure altered (e.g., decks and outbuildings) to eliminate impacts of high flows. This work was done through negotiation with landowners to protect physical structures and maintain human safety. Eminent domain was not used. In 2006, Hocker Flat, the first channel rehabilitation project was completed. Since 2006, Phase I of the channel rehabilitation component of the ROD (24 sites of the 47 enumerated in the FEIS) has been completed.

[2] Hocker Flat (Reclamation and California Department of Water Resources 2004), the Canyon Creek Suite (Reclamation and the Regional Board 2006), Indian Creek (Reclamation and Trinity County 2007), and Lewiston-Dark Gulch (Reclamation and the Trinity County Resource Conservation District 2008).

[3] On the TRRP website go to http://www.trrp.net/?page_id=409

Under the Implementation Plan for the Preferred Alternative of the Trinity River EIS/EIR (contained in Appendix C of the FEIS), an evaluation of the Phase I channel rehabilitation projects was described. The Implementation Plan states that:

"*Twenty-four sites are proposed during the first three years of construction if adequate funding is available. Additional projects will be constructed after evaluation of the first series of projects under Adaptive Environmental Assessment and Management. This evaluation will be ongoing beginning with construction of the first projects, but an interim period without construction activities may be necessary to fully evaluate the effectiveness of project designs and the effect of the new flow regime before beginning construction on the remaining sites.*"

Several non-profit organizations have now requested that the TRRP stop implementation of their channel rehabilitation and gravel augmentation projects until a "Phase I review" is completed.

The TRRP's Scientific Advisory Board (SAB)[4] and an external board of experts are now conducting the Phase 1 review and a final report is scheduled for completion by the end of July 2012. However, in order to realize the rapid systemic change in river form and function required to create juvenile rearing habitat, and ultimately to increase returning adults of all native salmonids, the members of the TMC have directed the TRRP to continue with implementation of rehabilitation projects, which are believed to be non-controversial, while simultaneously evaluating the Phase 1 projects. This schedule would allow the TRRP to continue mainstem restoration as efficiently as possible, while maintaining project momentum and funding. To date, the TRRP has utilized adaptive management in its project implementation and project design process; however, local fishing guides have noted that TRRP construction and gravel augmentation has been filling adult holding areas. The TRRP has been working with the Trinity River Guides Association (TRGA) over the last year and has recently met with several non-profit groups (e.g., the TRGA and Cal Trout) in an effort to modify the Proposed Project activities (at Lower Steiner Flat and Upper Junction City) so that both the fishermen and the TRRP support the activities. Adjustments to the Proposed Project activities recommended in this document have been made to ensure that adult salmonid holding habitat is not impacted by the projects. Gravel placement of less than 4 inches is not planned and in-river work has been minimized. Activities at the Lower Steiner Flat Rehabilitation Site are proposed to occur in two phases; Phase A activities would occur in 2012 and Phase B activities are future proposed activities that would occur at a later date so that adjustments to the project in the upper reach (Phase B) may be revised as appropriate after completion of the Phase 1 report. These changes and this delay in Phase B at Lower Steiner Flat is meant to ensure that Trinity River adult holding habitat is not adversely impacted in 2012 and so Phase B of the Proposed Lower Steiner Flat project may be revised, as necessary, based on information gained from the Phase I evaluation report.

Based on scientific need and requests from local fishermen, the TRRP initiated a monitoring program in 2010 to evaluate river bathymetry (including adult holding locations) within the 40-mile reach between Lewiston and the North Fork Trinity River. Boat based sonar and global positioning software have allowed quantification of pool volume and depths pre- and post-construction (at some sites) and pre- and post-flow release (e.g., pre- and post-2011 spring 11,000 cfs flow). Results from this monitoring are in preparation. These results will quantitatively evaluate how pools and other aquatic habitats have physically changed over this period. The results may then be used to

[4] Refer to: http://www.trrp.net/?page_id=417 for more information on the TRRP's panel of appointed experts

help guide both future project designs and potential updates to Phase B of the Lower Steiner Flat project.

1.5 Purpose and Need

NEPA regulations require that an EA briefly specify the need that the agency is responding to in proposing the various alternatives, including the proposed action (40 Code of Federal Regulations [CFR], Section 1508.9(a)). Similarly, CEQA requires that the IS include a statement of the objectives to be achieved by a proposed project (CEQA Guidelines, Section 15124(b)). Project objectives are discussed in Chapter 2 of this document.

Overall, the purpose of the TRRP is to implement the 2000 ROD. The TRRP is working to provide increases in habitat for all life stages of naturally produced anadromous fish native to the Trinity River in the amounts necessary to reach congressionally mandated goals. The strategy is to create habitat for native anadromous fish, while also ensuring that habitat complexity and quantity increases as the alluvial processes of the Trinity River are enhanced or restored in a manner that would perpetually maintain fish and wildlife resources (including threatened and endangered species) and the river ecosystem. The Proposed Project would continue to advance the implementation efforts of the TRRP and provides the opportunity to:

- Increase the diversity and amount of habitat for salmonids, particularly habitat suitable for rearing;
- Increase rearing habitat for juvenile salmonids, including coho and chinook salmon and steelhead;
- Ensure that the flows prescribed in the ROD would not increase the likelihood of flood-related impacts to public resources and private property within the project boundaries;
- Increase the structural and biological complexity of habitat for various species of wildlife associated with riparian habitats;
- Increase hydraulic and fluvial geomorphic diversity and complexity; and
- Measure/demonstrate the ecological response to changes in flow regimes, morphological features, and aquatic, riparian, and upland habitats.

The underlying need for the Proposed Project is to restore fish populations to pre-dam levels and restore dependent fisheries, including those held in trust by the federal government for the HVT and YT. This need results from:

- Requirements in the ROD (USDI 2000) to restore the Trinity River fishery through a combination of higher releases from Lewiston Dam (up to 11,000 cubic feet per second [cfs]), floodplain infrastructure improvements, channel rehabilitation projects, fine and coarse sediment management, watershed restoration, and an AEAM Program; and
- The expectation that the AEAM Program would continue to incorporate the experience provided through the planning, design, and implementation of the Proposed Action into future restoration and rehabilitation efforts proposed by the TRRP.

1.6 Purpose of This Document

Similar to the Trinity River Master EIR (North Coast Regional Water Quality Control Board and U.S. Bureau of Reclamation 2009), this site-specific EA/IS for the Proposed Project at the Lower

Steiner Flat and Upper Junction City sites has been prepared to comply with NEPA (42 USC 4321 et seq.) and CEQA (California PRC, Section 21000 et seq.). Both statutes generally require that governmental agencies disclose information about proposed activities that may affect the environment, evaluate the potential environmental impacts of their proposed actions before making formal commitments to implement them, and involve the public in the environmental review process. This combined NEPA/CEQA document evaluates the environmental impacts of the Proposed Project, recommends mitigation measures to minimize impacts, and is designed to facilitate lawful implementation under all applicable laws.

CEQA allows for preparation of a Master EIR that analyzes a series of related actions that are characterized as one large project or program, such as the channel rehabilitation and sediment management activities proposed by the TRRP. The Trinity River Master EIR meets the elements required for a Program EIR pursuant to California Code of Regulations, Title 14, Section 15168. A Master EIR evaluates at a programmatic level the direct and indirect environmental impacts, cumulative impacts, growth-inducing impacts, and irreversible significant effects on the environment of subsequent specific projects. A project-level EIR evaluates the environmental impacts of a specific project (CEQA Guidelines, Section 15161), focusing primarily on the changes in the environment that would occur because of project implementation and evaluates all phases of a particular project (i.e., planning, construction, and operation). A Master EIR forms the basis for analyzing the effects of subsequent projects (CEQA Guidelines Section 15175, et. seq.), a process known as "tiering." Tiering, which is recognized under both NEPA and CEQA, refers to the practice of covering general matters in broader scope environmental documents and focusing subsequent documents on the issues germane to the site-specific actions (40 CFR 1508.28). Tiering is appropriate when a sequence of analyses progresses from a broad, conceptual, or planning-level review over a wide area or program to a project-specific and site-specific analysis. Tiering helps the lead agencies focus on issues that are "ripe" for decision, while excluding from consideration issues already decided or not yet ripe (CEQA Guideline Section 15385). The general analysis in the broader document is incorporated by reference into the subsequent documents, meaning that the information in the broader document does not need to be repeated in subsequent documents.

Because the Trinity River Master EIR provides programmatic level review from which site-specific projects may tier, the Proposed Project level analysis in this EA/IS is tiered from that document. In addition, the EIS portion of the Trinity River FEIS/EIR functions as a project-level NEPA document for policy decisions associated with managing Trinity River flows and as a programmatic NEPA document providing "first-tier" review of other potential actions, including the Proposed Project. This EA/IS focuses only on Proposed Project site-specific activities and serves as a joint NEPA/CEQA document for project authorization by both federal and California state regulatory agencies.

1.7 Federal and California Lead Agencies

This document is tiered to and incorporates the information contained in the Trinity River Master EIR by reference in its entirety. As an integrated, multi-purpose document, the Trinity River Master EIR is responsive to the efforts of the lead, responsible, and cooperating agencies to ensure that it addresses applicable laws, policies, and regulations. At the same time, it incorporates the

input provided during the scoping process in conjunction with the extensive level of consultation and coordination between the agencies.

Reclamation is responsible for the funding and implementation of the Proposed Project and is the federal lead agency under NEPA. The BLM, which manages land within the Proposed Project site boundaries, serves as a co-lead for the project. The Regional Water Board is the California state lead agency under CEQA. The Trinity County Resource Conservation District (TCRCD), in its role as an experienced implementer of restoration actions, collaborator on TRRP revegetation, and past CEQA lead for the Lewiston-Dark Gulch project, is working with the TRRP to ensure that CEQA guidelines are fulfilled.

Trinity River Master EIR Phase 2 sites, like the Lower Steiner Flat and Upper Junction City sites, are now eligible for enrollment and CEQA coverage following completion of any subsequent project-specific environmental analysis required to supplement the programmatic level review contained in the Trinity River Master EIR as necessary. Under California Code of Regulations, title 14, section 15177, after a Master EIR has been prepared and certified, subsequent projects which the lead agency determines as being within the scope of the Master EIR will be subject to only limited environmental review.

The preparation of a new environmental document and new written findings will not be required if, based on a review of the initial study prepared for the subsequent project, the lead agency determines, on the basis of written findings, that no additional significant environmental effect will result from the proposal, no new additional mitigation measures or alternatives may be required, and that the project is within the scope of the Master EIR. Whether a subsequent project is within the scope of the Master EIR is a question of fact to be determined by the lead agency based upon a review of the initial study to determine whether there are additional significant effects or new additional mitigation measures or alternatives required for the subsequent project that are not already discussed in the Master EIR. This Lower Steiner Flat and Upper Junction City EA/IS contains a site-specific project description and other information required to apply for enrollment under General Permit R1-2010-0028 for Trinity River channel rehabilitation activities which the Regional Water Board will consider in making its determination and approval decision.

1.8 Regulatory Framework

In addition to CEQA and NEPA, the Proposed Project is subject to a variety of federal, state, and local statutes, regulations, policies, and other authorities. The decision to facilitate mechanical channel rehabilitation projects and sediment management activities requires various permits from state agencies. The primary responsible and trustee agencies are U.S. Army Corps of Engineers (USACE), USFWS, NMFS, DWR, CDFG, the Regional Water Board, California Department of Transportation (Caltrans), and Trinity County. Chapter 3 of the Trinity River Master EIR, Regulatory Framework, includes descriptions of the actions required of these agencies and of permits required for the TRRP work on the Trinity River as well as an overview of the principal environmental statutes, not described above, which establish the regulatory setting that would be used to assess the impacts of rehabilitation activities. As necessary, the lead, cooperating, and responsible agencies will use the Trinity River Master EIR document for their permitting and approval process. Implementation of the Proposed Project, as described in Chapter 2, would

generally require compliance with the federal, state, and local permit and approval processes and regulations described in Chapter 3 of the Trinity River Master EIR.

1.9 Scoping and Public Involvement

Since the signing of the ROD and efforts to begin its implementation, numerous public meetings and open houses have been held by TRRP and various lead agencies to gain public input and information for each channel rehabilitation site as well as programmatically under the Trinity River Master EIR. The Trinity River Master EIR includes a complete description of scoping and public involvement activities that occurred as part of that process (Trinity River Master EIR, section 1.6). The same agencies and organizations that were consulted during the preparation of the Trinity River Master EIR document are again in consultation for the Proposed Project.

The Trinity River Master EIR was developed specifically to identify and mitigate potential significant impacts as defined by CEQA. Accordingly, the same issues that were addressed programmatically in the Trinity River Master EIR are considered germane to the Proposed Project. These issues were used to develop the descriptions of the resource areas and the associated impact analysis presented in Chapter 3 of this document.

Designs for the Proposed Project have been under development since 2010, by the CH2MHill design group at the Lower Steiner Flat site, and by the Department of Interior design group at the Upper Junction City site. The individual design groups have worked in cooperation with the Design Team at the TRRP to develop the Proposed Project. Preliminary designs were first discussed with the public at an October 12, 2010 open house at the Douglas City School in Douglas City, California. Designs were again discussed at two public meetings held at the North Fork Grange Hall, in Junction City on February 11, 2011 and on July 27, 2011. In addition, TRRP staff has worked closely with the local TRGA to understand their concerns and to adjust the Proposed Project to alleviate these concerns where possible. TRRP staff have attended Trinity River fishing guide meetings and floated the river with individual guides in order to gain their project insights. Outreach to local mining groups with interest in the Lower Steiner Flat site has also been initiated. TRRP staff members will continue to meet with local groups (e.g., fishing guides and mining groups) and landowners from the Junction City and Douglas City areas, where the sites are located, in order to obtain stakeholder input and advice as well as to address concerns.

The TCRCD will assist the TRRP with public notification and meetings so interested parties can learn about the project and provide their input. The official public review period for the EA/IS begins when the document is submitted to the State Clearinghouse. This document will be circulated to local, state, and federal agencies and to interested organizations and individuals for review and comment on the analysis provided in this document. The public scoping period will officially run for 30 days from the time the EA/IS is submitted to the State Clearinghouse. Concurrent with this review period, public notice will be provided to solicit additional comments from the public and interested parties. Public notice will include: advertisement(s) in the local Trinity Journal newspaper, letters mailed to local landowners, and public notice posted at the project sites informing the public of the availability of the EA/IS for review.

Reclamation (represented by members of the TRRP) will hold public meetings during the review period at which comments (written and oral) will be invited. A public meeting was held at 6:00 p.m. on January 26, 2012 at the Douglas City Fire Station, in Douglas City, California.

Approximately 20 members of the public attended and their inquiries focused on access to the Lower Steiner Flat boat ramp during construction, concerns about introduction of small gravel (<4 inch diameter) into the river, and written documentation on the evaluation of the TRRP's Phase 1 projects. Notice of this and all public meetings is announced in the local Trinity Journal newspaper and posted on the TRRP's website:

http://www.trrp.net/

All written comments and questions regarding this document that raise issues under NEPA, CEQA, or both, should be addressed to:

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Phone: (530) 623-1800
Fax: (530) 623-5944

The federal and state lead agencies will share these written comments and will respond to them in a final document.

Copies of this document will be made available for review on the TRRP website and on Reclamation's website: http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=8963 as well as at the following locations:

Trinity River Restoration Program
United States Department of the Interior
Bureau of Reclamation
1313 South Main Street
Weaverville, California 96093

U.S. Department of Interior
Bureau of Land Management
Redding Field Office
355 Hemsted Drive
Redding, CA 96002

Trinity County Resource Conservation District
#1 Horseshoe Square
Weaverville, California 96093

Trinity County Library, Weaverville Branch
211 Main Street
Weaverville, California 96093

Copies of the Trinity River Master EIR, the December 19, 2000, ROD and Trinity River FEIS/EIR are available for public review on the TRRP website: http://www.trrp.net or at:

Trinity River Restoration Program Office
U.S. Department of the Interior – Bureau of Reclamation
1313 South Main Street
Weaverville, California 96093

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